## **ABSTRACT**

A method is described that receives user-selected sequence and provides a custom array designed for resequencing the user-selected sequence. The system determines probes corresponding to the sequence and to possible variants of the sequence and generates a custom probe array design. The system then displays the custom probe array design to the user via a graphical user interface and receives a user acceptance of the design. The system provides the user with the accepted custom probe array. The system may also enable a number of users to share space on a custom probe array. Another optional feature is to enable a number of users to share in ordering portions of a lot of catalog probe arrays to take advantage of economies of scale from lot-size purchases.

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